

Amendments to the Claims

Please amend the claims as indicated.

1. (Currently Amended) An apparatus for identifying network mis-cabling, the apparatus comprising:

a detection module configured to detect a new connection at a first network switch, the new connection facilitated by a first physical termination of a network cable, the first network switch forming part of a data network comprising a plurality of network switches, wherein each network switch is connected to at least one non-switch network device;

a comparison module configured to compare the new connection to a switch connection rule if the new connection is a network switch connection, else comparing the new connection to a non-switch connection rule, each connection rule defining a cabling connection, a network topology, and a type of cabling, the switch connection rule allowing communication to a second network switch in a separate sub-network over two loop topology external cables and the non-switch connection rule allowing communication over a point-to-point topology sub-network cable; and

a cabling connection module configured to control authorization of a network communication over the new connection in accordance with the connection rules.

2. (Original) The apparatus of claim 1, wherein the detection module is further configured to determine if the new connection is a switch connection.

3. (Original) The apparatus of claim 1, further comprising a report module configured to notify a host of the new connection at the network switch.

4. (Original) The apparatus of claim 1, wherein the cabling connection module comprises an isolation module configured to isolate the new connection from the data network in response to a determination that the new connection is not a legal cabling connection.

5. (Original) The apparatus of claim 1, wherein the cabling connection module comprises an insertion module configured to insert the new connection into the data network in response to a determination that the new connection is a legal cabling connection.

6. (Original) The apparatus of claim 1, wherein the cabling connection module is further configured to alter an existing connection on the data network.

7. (Currently Amended) The apparatus of claim 1, further comprising a verification module configured to determine if the new connection conflicts with an existing connection separate from the new connection on the data network.

8. (Currently Amended) The apparatus of claim 1, further comprising a record module configured to establish a connection request record stored in a network server in communication with the data network, the connection request record configured to identify the new connection at the first network switch, the new connection facilitated by a first physical termination of a cable, and a corresponding second new connection at a second network device, the second new connection facilitated by a second physical termination of the ~~network~~ cable.

9. (Original) The apparatus of claim 8, wherein the record module is configured to obtain a second network device identifier, the second network device identifier descriptive of the second new connection.

10. (Currently Amended) The apparatus of claim 8, wherein the second network device is a second network switch and the connection request record comprises a first switch identifier and a

first port identifier corresponding to the first new connection and a second switch identifier and a second port identifier corresponding to the second new connection, and connection metadata.

11. (Original) The apparatus of claim 8, wherein the second network device is a non-switch network device and the connection request record comprises a first switch identifier and a first port identifier corresponding to the first new connection and a non-switch network device identifier corresponding to the second new connection.

12. (Currently Amended) The apparatus of claim 8, wherein the connection request record comprises is further configured to identify at least one of a device type identifier, a physical location identifier, and an anticipated bandwidth identifier.

13. (Original) The apparatus of claim 8, wherein the record module is further configured to establish a connection record, the connection record descriptive of the new connection and stored in a connection record database on a host.

14. (Currently Amended) A system for identifying network mis-cabling, the system comprising:

- a data network comprising a plurality of network switches, each network switch connected to at least one non-network switch device;
- a first network switch device;
- ~~an external cable~~ configured to connect to the first network switch device;
- a second network device configured to allow a new connection, the new connection formed by connecting the ~~external~~ cable to the second network device;
- a cabling connection module configured to refuse network service via the new connection prior to a determination that the new connection is a legal connection according to a switch connection rule if the new second network device is a switch else refuse network service via the new connection prior to a

determination that the new connection is a legal connection according to a non-switch connection rule, each connection rule defining a ~~cabling connection~~, a network topology, and a type of cabling, the switch connection rule allowing communication to a second network switch in a separate sub-network over two loop topology external cables and the non-switch connection rule allowing communication over a point-to-point topology sub-network cable.

15. (Currently Amended) A system for identifying network mis-cabling, the system comprising:

a host server having a host bus adapter;

a first network switch having a network adapter, the first network switch forming part of a data network comprising a plurality of network switches, wherein each network switch is connected to at least one non-switch network device;

an external cable having a first termination and a second termination, the first termination connected to the network adapter forming a first new connection and the second termination connected to the host bus adapter forming a second new termination;

a cabling connection apparatus configured to detect the first new connection to the first network switch and further configured to report the first new connection; and

a comparison module configured to compare the first new connection to a switch connection rule if the first new connection is a network switch connection, else comparing the first new connection to a non-switch connection rule in order to determine if the first new connection is a legal cabling connection, each connection rule defining a ~~cabling connection~~, a network topology, and a type of cabling, the switch connection rule allowing communication to a second network switch in a separate sub-network over two loop topology external cables and the

non-switch connection rule allowing communication over a point-to-point topology sub-network cable; and
the cabling connection apparatus further configured to control authorization of a network communication over the new connection in accordance with the connection rules.

16. (Original) The system of claim 15, further comprising an isolation module configured to isolate the first new connection, prohibiting a network communication via the first new connection, in response to a determination that the first new connection is not a legal cabling connection.

17. (Currently Amended) The system of claim 15, further comprising a record module configured to establish a connection request record stored in a network server in communication with the data network, the connection request record configured to identify the first new connection and the second new connection, wherein the connection request record comprises a device type identifier, a physical location identifier, and an anticipated bandwidth identifier.

18. (Original) The system of claim 17, wherein the record module is further configured to transmit the connection request record to the comparison module.

19. (Currently Amended) A computer readable storage medium comprising computer readable code configured to carry out a method for identifying network mis-cabling, the method comprising:

detecting a new connection at a first network switch; ~~the new connection facilitated by a first physical termination of a network cable;~~ the first network switch forming part of a data network comprising a plurality of network switches, wherein each network switch is connected to at least one non-switch network device;

determining if the new connection is a network switch connection;
comparing the new connection to a switch connection rule if the new connection is a network switch connection, else comparing the new connection to a non-switch connection rule, each connection rule defining a cabling connection, a network topology, and a type of cabling, the switch connection rule allowing communication to a second network switch in a separate sub-network over two loop topology external cables and the non-switch connection rule allowing communication over a point-to-point topology sub-network cable; and
controlling authorization of a network communication over the new connection in accordance with the connection rules.

20. (Canceled)

21. (Original) The computer readable storage medium of claim 19, wherein the method further comprises notifying a host of the new connection at the network switch.

22. (Original) The computer readable storage medium of claim 19, wherein the method further comprises isolating the new connection from the data network in response to a determination that the new connection is not a legal cabling connection.

23. (Original) The computer readable storage medium of claim 19, wherein the method further comprises inserting the new connection into the data network in response to a determination that the new connection is a legal cabling connection.

24. (Original) The computer readable storage medium of claim 19, wherein the method further comprises altering an existing connection on the data network.

25. (Currently Amended) The computer readable storage medium of claim 19, wherein the method further comprises determining if the new connection conflicts with an existing connection on the data network separate from the new connection.

26. (Currently Amended) The computer readable storage medium of claim 19, wherein the method further comprises establishing a connection request record, the connection request record configured to identify the new connection at the first network switch and a corresponding second new connection at a second network device, the new connection facilitated by a first physical termination of a cable and the second new connection facilitated by a second physical termination of the network cable.

27. (Currently Amended) The computer readable storage medium of claim ~~26~~19, wherein the method further comprises obtaining a second network device identifier, the second network device identifier descriptive of the second new connection.

28. (Currently Amended) The computer readable storage medium of claim ~~26~~19, wherein the connection request record method further comprises ~~identifying at least one of~~ a device type identifier, a physical location identifier, and an anticipated bandwidth identifier corresponding to the new connection.

29. (Original) The computer readable storage medium of claim 19, wherein the method further comprises establishing a connection record, the connection record descriptive of the new connection and stored in a connection record database on a host.

30. (Currently Amended) A method for identifying network mis-cabling, the method comprising:

detecting a new connection at a first network switch, ~~the new connection facilitated by a first physical termination of a network cable, the first network~~

switch forming part of a data network comprising a plurality of network switches, wherein each network switch is connected to at least one non-switch network device;

determining if the new connection is a network switch connection;

comparing the new connection to a switch connection rule if the new connection is a network switch connection, else comparing the new connection to a non-switch connection rule; each connection rule defining a cabling connection, a network topology, and a type of cabling, the switch connection rule allowing communication to a second network switch in a separate sub-network over two loop topology external cables and the non-switch connection rule allowing communication over a point-to-point topology sub-network cable; and

controlling authorization of a network communication over the new connection in accordance with the connection rules.

31. (Currently Amended) An apparatus for identifying network mis-cabling, the apparatus comprising:

means for detecting a new connection at a first network switch, the new connection facilitated by a first physical termination of a network cable, the first network switch forming part of a data network comprising a plurality of network switches, wherein each network switch is connected to at least one non-switch network device;

means for comparing the new connection to a switch connection rule if the new connection is a network switch connection, else comparing the new connection to a non-switch connection rule, each connection rule defining a cabling connection, a network topology, and a type of cabling, the switch connection rule allowing communication to a second network switch in a separate sub-network over two loop topology external cables and the non-switch

connection rule allowing communication over a point-to-point topology sub-network cable; and

means for controlling authorization of a network communication over the new connection in accordance with the connection rules.

32. (New) The method of claim 30, wherein the method further comprises establishing a connection request record, the connection request record configured to identify the new connection at the first network switch, wherein the connection request record comprises a device type identifier, a physical location identifier, and an anticipated bandwidth identifier corresponding to the new connection, and a corresponding second new connection at a second network device, the new connection facilitated by a first physical termination of a cable and the second new connection facilitated by a second physical termination of the cable.